

# ***Arizona Climate Change Advisory Group Goal-Setting Process***

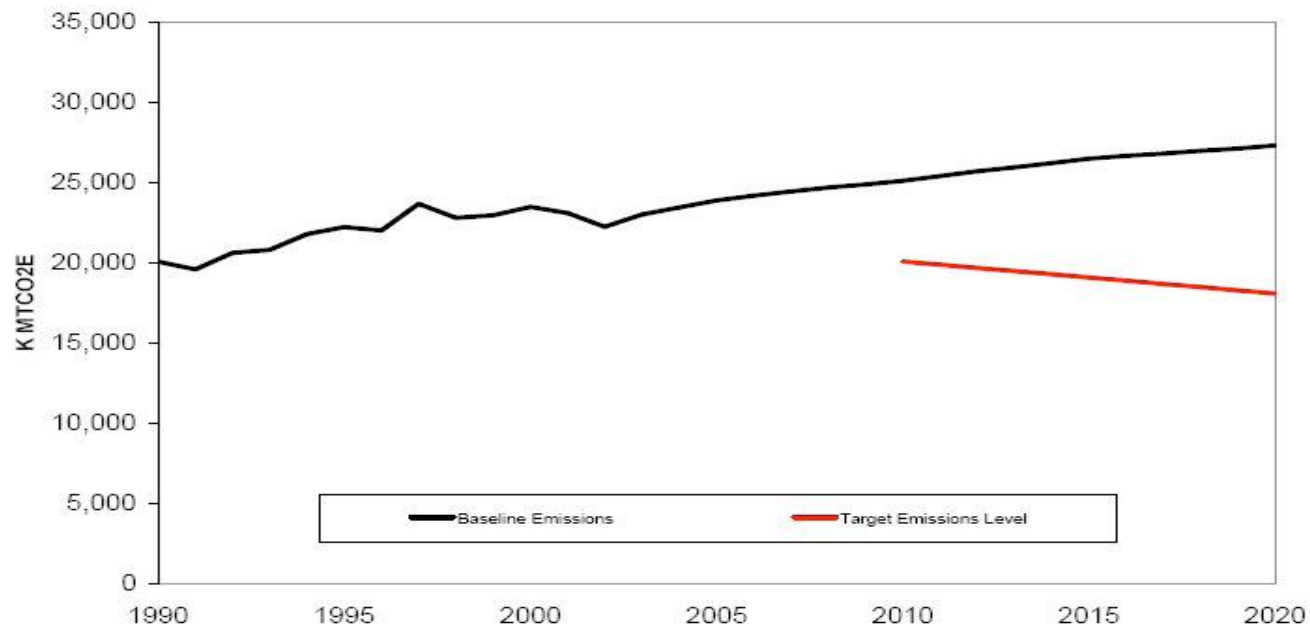
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# Arizona CCAG Goal-Setting

## Closing the Climate Gap

Figure 1: Emissions Baseline and Target



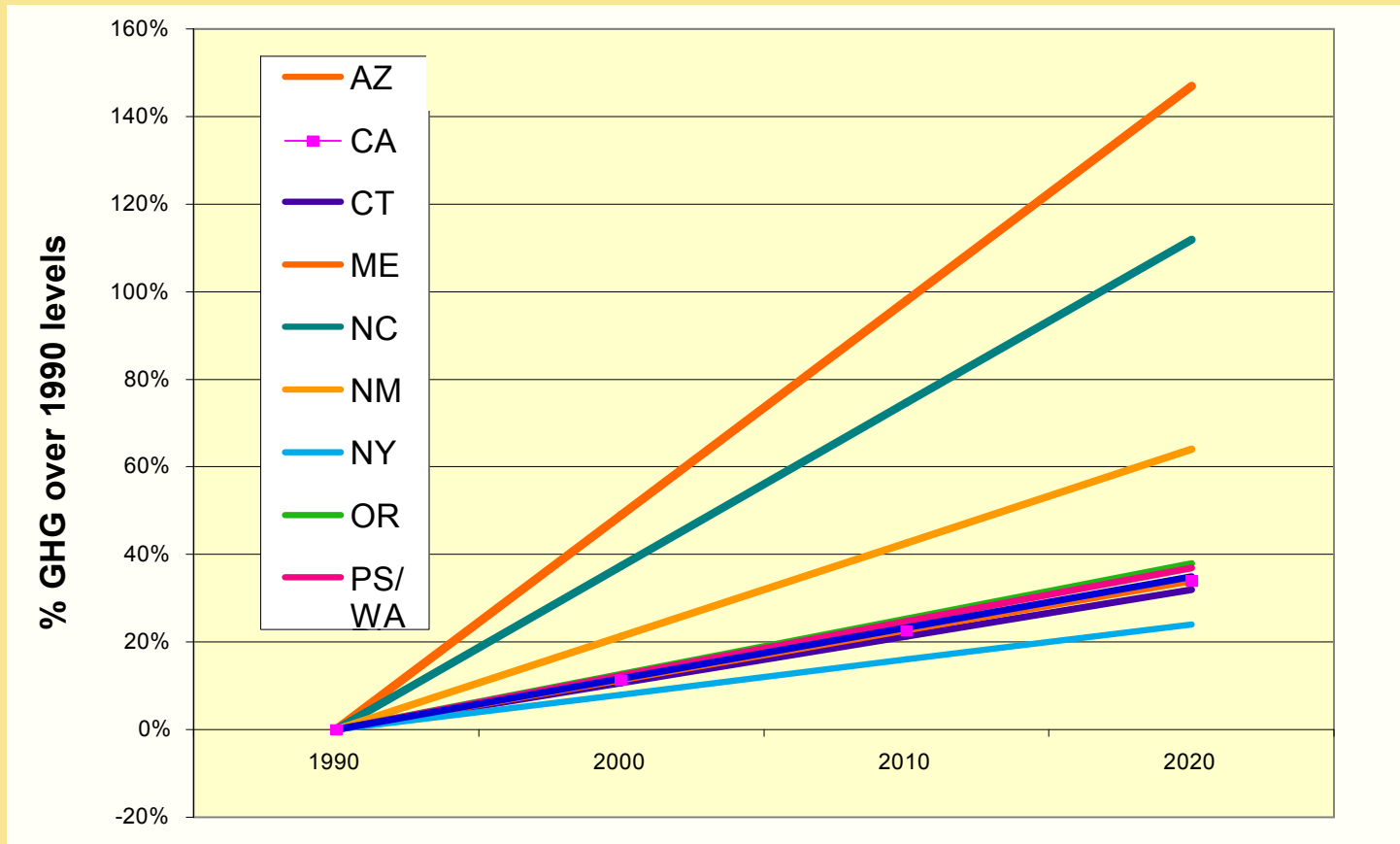
# Arizona CCAG Goal-Setting

- Different approaches to goal-setting
  - Some states just set a target
  - Others, including AZ, used the CCAG process to decide
    - Whether to recommend a goal
    - Determine what a realistic, achievable goal may be

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- Step 1 – Review GHG emissions inventory and forecast, economic and population forecasts
- Step 2 – Compare with other state/regional (NE, West Coast states) experiences
  - NE/WC: large overall emissions, slow growth
  - AZ: low overall emissions, large growth

# AZ GHG Growth vs. Other States



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- Step 3 – Analyzing data for NE/WC states showed a 33% emission growth rate 1990-2020
  - 1990 levels by 2010 (22% reduction)
  - 10% below 1990 levels by 2020 (43% reduction)

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- Step 4 – Applied proportionate reductions to AZ forecast levels
  - Resulted in emissions growth rates of 76% and 104% in 2010 and 2020, respectively, against 1990 base year
  - Resulted in emissions growth rates of 27% and 65% in 2010 and 2020, respectively, against 2000 base year

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- Is the objective to slow growth in emissions?

**or**

- Is the objective to reduce emissions beyond a base year?



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- Key Assumptions
  - Linear GHG emission trends
  - Average annual (linear) GHG reduction estimates in 2010 and 2020
  - Proportionate effort by Arizona compared to coastal states
- Key Uncertainties
  - Results of bottom up planning by the CCAG, regional differences
  - Reliability of forecasting
  - Results of actual implementation
  - Margin of safety and or error

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- Step 5 – CCS presented several straw scenarios for members to consider
  - Scenario 1 – reflected what AZ may experience if comparable level of effort employed by NE/WC states were used.
  - Scenario 2 - the New England Governors' targets applied to AZ.
  - Scenario 3 - a series of 50% GHG growth rate cuts that vary by 1990 and 2000 start years.

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- Scenario 4 - a comparison of the 50% growth rate cuts and levels of effort used by the NE/WC states indexed against a 2000 start year.
- Scenario 5 - a graduated GHG rate cut that starts with a 25% cut in 2010 emissions from a 2000 year start, and proceeds to a 50% cut in emissions from a 2000 start.
- Scenario 6 – a variation of Scenario 5 showing actual tons of CO<sub>2</sub>e being reduced.
- Scenario 7 – another variation of Scenario 5 showing a comparison of the 25%-50% GHG growth rate cut versus a simple 50% cut.

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- Step 6 – Technical Work Group chose a sub-set of the straw scenarios to present to the full CCAG at its 4<sup>th</sup> meeting in March 2006. (Scenarios #2, 4, 7 and one showing maintenance of an average zero growth in 2006 GHG levels by 2020.)
- CCAG members provided feedback on scenarios, including a request to see time horizon extended out to 2040.

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- Step 7 – Technical Work Group and CCS continued refinements of goal and timeline draft based on CCAG input.
- Step 8 – At its 5<sup>th</sup> meeting in May 2006, CCAG members discussed alternative high- and low-range scenarios for reducing emissions before voting unanimously to support a goal of achieving 2000 emission levels by 2020, with a 50 percent reduction below 2000 levels by 2040.

# AZ Goal: 2000 Levels by 2020 and 50% Below 2000 levels by 2040

